

CLAIMS

1. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", basically comprising a single metal body (1) of single block construction, on top of which is mounted a sustaining construction (2), which for its part receives the assembly of a mechanical actuation means (4) of the closing blade (3); the single metal body (1) incorporates circular sealing elements through which the closing blade (3) shall advance in order to promote the closing of the valve, the valve itself being especially characterized by the fact that the single block body (1) incorporates on each of its two faces, i.e., downstream or upstream in relation of the flow direction of the fluid passing through the valve, two sealing elements (7), assembled in fully opposite form and in mutual contact; the sealing elements (7), also called hose sections are manufactured from elastomeric material, presenting the feature of being interchangeable; the hose sections (7) are totally hollow in their whole construction circumference, each one being provided with a sealed circumferential pneumatic chamber (8), totally filled with air.

2. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claim 1, where the valve in question is characterized by the fact that the chamber (8) of each of the hose sections (7) permits that the contact face of the hose section (7) can be deformed more uniformly in relation to the closing blade (3), a condition reached especially by the air volume compression effect inside the mentioned chamber (8).

3. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claims 1 and 2, characterized by the fact that the hose sections (7) present a convex contour on their internal faces (9).

4. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claim 3, characterized by the fact that the convex format of the internal face (9) of each one of the hose sections (7) causes the pipeline fluid pressure itself to provide an increment of the resulting forces acting in the axial flow direction, reducing the need of previous compression of the referred-to hose sections and assuring total tightness while the valve remains open to the passage of the pipeline flow.

5. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claims 1 and 2, characterized by the fact that the hose sections (7) incorporate each a "T" shaped metal core (10); each metal core (10) is composed of two independent portions, indicated by the reference numbers (11) and (12); the function of the tubular portion (11) is to provide rigidity to the seal, while the other portion (12), which has the form of a disk, acts as a distribution ring of the load exercised by the pipeline flanges.

6. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claim 1, characterized by the fact that the valve now proposed incorporates sliding rings (13) manufactured from wear resistant plastic material; the sliding rings (13) are installed in corresponding circular grooves (14) defined in the housing (15) of the single block body (1) of the valve now proposed.

7. "IMPROVEMENT INTRODUCED INTO A GUILLOTINE VALVE", according to claim 1, characterized by the fact that the valve now dealt with also counts on an upper sealing system (16), formed by a part (17) obtained from an elastomeric compound, which is associated to a metal reinforcement (18); the upper sealing system (16) counts with grease nipples (19) mounted directly through the metal reinforcement part (18) and

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communicate by a channel (21); the metal reinforcement part (18) is attached to the valve body (1) by means of the bolts (22).